NEW-ENGLAND FARMER.

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NEW ENGLAND FARMER.

THE DISCUSSION ON THE POTATO DISEASE.

Mr Breck—Your excellent report of the late discussion at the State House, on the subject of the potato disorder—its cause and remedies—afforded me no little *entertainment*, if not edification. There is a remarkable agreement between the results of this discussion and those of that which was held awhile since in Glasgow, Scotland, where, as in this case, there was a remarkable *disagreement* in the statements of the speakers. The two discussions serve to prove *one* thing, if nothing more—viz: that the disease is one of *extraordinary* character. It may not be altogether useless to give, in a condensed form, the material facts elicited at the meeting at the State House, and here they are:

As *causes* of the disease, the following theories were proved fallacious: 1st, Manuring in the hill; 2d, Excessive heat in September; 3d, Deterioration of seed. This trio, then, may be freed from further suspicion, as each and all have been found not guilty. A little observation joined with a moderate degree of reasoning faculty, would seem to have been sufficient to demolish the two first named, even without the aid of actual experience.

Next, the discussion proved, that as *securities* against the disease, the following measures were of no avail: 1, early planting; 2, late planting; 3, high planting; 4, low planting; 5, planting on new sward land; 6, planting particular varieties.

Next, the discussion served to show that in one or two instances stated, lime, ashes, plaster, and charcoal, put in the hills, had, as was supposed, preserved crops from attack by the disease; and one case was stated where, the potatoes having rotted after being stored, by picking out those that were affected and sprinkling slacked lime on layers of the sound ones, they were preserved from disease. One or two instances were stated at the previous meeting, where salt put in the hill, had saved the crop; and at the last meeting a case was mentioned where, by the use of sea-weeds and salt mud, it was thought the crop had escaped attack; but in another instance mentioned, the use of sea-manure had no such effect.

There remains one other important fact elicited by the discussion, and that I consider the *most* important of the lot: I mean the result of Mr Teschemacher's experiments, which led him to the belief (well grounded, in my opinion,) that the cause of the disease is a species of *fungus*, in which opinion I think he was supported by the statement of Mr Dodge, that on his corn near his potatoes that were most diseased, there was a good deal of *smut*, and that where there was little or none of this on the corn, the potatoes adjoining were free from disease. This *smut*, no doubt, was the effect and product of the fungus.* But, after all, the *cause* of the malady is of trivial consequence compared with the importance of discovering a *remedy*. Mr Teschemacher found common salt applied to the supposed fungi, to operate immediately as a decomposer, and hence inferred that it might prove a remedy for the disease, and recommended its liberal application to fields designed for potatoes this year. The statements made at this and the previous meeting, that the use of salt or saline matters had served to protect potato crops from the disease, in several instances, (whereas but one instance was named of a contrary result, and that was with sea-manure,) I think deserving of notice, as supporting Mr Teschemacher's recommendation, and as being, therefore, highly important to our farmers, who are, and naturally enough, eager to learn if any, and if any *what*, preventive means can be adopted to secure their potato crops this year from visitation by the destructive rot. No doubt, any strongly antiseptic substance, as lime and charcoal, as well as salt, would operate to ward off the disease; but as the latter substance has a known beneficial effect as a manure, and is a guard against worms, we should prefer it to all others to use as a remedy for the evil in question. Refuse salt can usually be procured in cities and large towns at a cheap rate, and we advise farmers to provide themselves in season with a good supply for application to their potato grounds the coming spring.

As to the danger of feeding diseased potatoes to animals, the facts stated at this and the previous meeting, would not seem to warrant the belief that any hazard was incurred in so doing, if we except the case of *Mr Gleason's hog*, and *she* was cured by the application of *Dr.* Teschemacher's prescription. [He will take no offence at my *title* prefixed to his name, for although he may not *have* received, he is *worthy* of the LL. D.] In an article, imputed to Prof. Hitchcock, which appeared in the Amherst paper, some time last fall, it was stated that potatoes affected with this singular disease, had no more deleterious properties than those affected with common rot—and that their noxious qualities, (if any they have,) would be dispelled by cooking. I do not feel competent to give an opinion on this point, as I have had no experience in the case to support it; but I must say, that were my potatoes affected with this singular disease, I should be somewhat afraid to eat them *myself*—and certainly I would not give that to an animal as food, which I considered dangerous to eat myself. I am well aware that some animals can eat without injury that which is rank poison to man; but even the hog, to which, it is said, the *rattlesnake* is a most luscious eating, was injured, in one instance, by a meal of diseased potatoes.

Very respectfully, yours,

J. H. D.

To Relieve Colic in Horses.—Rub spirits of turpentine on the breast of the horse, and if he be drenched with it, also, he will be relieved. Horses should never be put to severe work on a full stomach: more horses are hurt by hard driving after a full feed, than by a full feed after hard driving. —*English Far. Jour.*

Rat Catchers.—The *coon* is said to be superior to either cats or terriers, as rat catchers.—*Amer. Far.* [But it is not easy to catch a *coon*.]

*Rather the *fungus* itself.—ED.

For the N. E. Farmer.

THE POTATO DISEASE.

Mr Breck—I should be glad if those who attribute the potato disease to "atmospheric influence," would explain what they mean by this term. I think, also, that it is attributable to atmospheric influence, and by this I mean that the spores of the fungus are wafted by myriads in the atmosphere, and are promiscuously deposited by it on the surface of the soil, are carried down to and absorbed by the root, and wherever the juices of the plant offer favorable circumstances, they vegetate. This, as I stated in my remarks at the meeting at the State House, is the explanation offered by Decandolle, for the appearance of the rust fungus on corn. Where the spores are deposited, is of course as uncertain as where the shadow of the clouds will rest on a summer day—and the favorable circumstances which would produce their developement, are not yet investigated: they may be produced by heat or by cold, for aught we know. At the meeting on the 14th, at the State House, the question put by me to Mr Dodge, as reported in your last number, throws the only additional light I can see on the subject, inasmuch as it connects intimately the fungus (smut) on the corn with that which I consider as the cause of the disease in the potato; it being the same kind of fungus developed in another vegetable. The aphis, it is well known, feeds chiefly on the vegetable after it has become, from any other cause, in an unhealthy state, and therefore cannot be called the cause of the disease. It is very common on the potato, which the rot has not touched, but of which the stalks have become unhealthy from other reasons.

With respect to the honey dew, I believe its origin is an unsettled point. My own observations on the subject lead me to think that it is an excrementitious exudation from plants, the same as I believe the honey of flowers and the drops secreted and thrown off by various glands on leaves and stems to be—these being the excretions of healthy action, while the honey dew is produced in such large quantity by unhealthy action—it would be more proper to say, by the efforts of the vegetable to get rid of a larger quantity of unsuitable juice in its vessels than it can healthily assimilate, thus producing a state of disease called honey dew.

I can only repeat that I retain my opinion with regard to the disease in the potato, and that I think lime, salt, and various other substances, will prove complete remedies.

Yours, truly,

J. E. TESCHEMACHER.

Boston, Jan. 22, 1845.

Old Pickle for Pork.—Some persons place a high value on old pickle for preserving pork, even as high as a dollar a gallon, as it possesses superior properties for keeping the meat sweet and good. It being already charged with the juices of meat, it will not so readily extract them from a fresh lot with which it comes in contact.—*Boston Cultivator.*

From the Albany Cultivator.

INDIAN CORN AND POTATOES.

Salt Destructive to the Grub and Wire Worm—Diseased Potatoes.

Luther Tucker, Esq.—Every experiment which is made by the farmer, whether successful or otherwise, should be published for the benefit of the community. Among the enemies of the corn crop, especially on sward land, the grub and wire worm are pre-eminent. Many expedients have been tried for their destruction, some of which have proved useful, and others have entirely failed.

I had about three acres of sward land which had been in grass for several years, which I ploughed in the spring for corn. On turning the sod under, I found the worms in great numbers, and fearful that my crop would be seriously injured by them, I sought for a preventive of their ravages. After it was ploughed, I sowed broadcast about one and a half bushels of fine salt to the acre, and harrowed and rolled the land. My seed was prepared by soaking in warm water for about eighteen hours—and I dissolved two ounces of sal ammoniac, and put in the water, in which about a bushel of seed was prepared. The corn was planted the two succeeding days after the salt was sown. The seed germinated very quick, the plants remarkably vigorous, and grew luxuriantly. Not a single hill during the season, was found injured by the worms, altho' multitudes of them were in the ground. A neighbor, who occupied a field near mine, and who planted his seed in the ordinary way, lost at least one-third of his field by the worms.

I have no doubt my corn was much benefitted by the sal ammoniac, in bringing it forward rapidly, but I have supposed that its preservation from the ravages of the worms, resulted from the application of the salt. The crop was an unusually good one, and ripened very early. The soil was a gravelly loam.

In a field near by the one in which the corn was planted, I had three acres of potatoes. This was sward ground, but rather a sandy soil, with a clay subsoil. The land was manured with a good top dressing of barn yard manure, previous to ploughing. I planted five varieties of potatoes—the Perfectionists or Kelseyites, the seed of which I procured of Dr. H. Wendell, of Albany, two years since, and which has proved a very valuable as well as prolific variety. The Pink Eyes, Silver Lake or Chenangoes, Black Ohio potatoes, and the Rohan.

The seed was cut, and the potatoes planted in hills about three feet apart, The potatoes came up well, and for a time advanced as rapidly as could be desired. The *curl* or *rust* made its appearance when the potatoes were about half grown, and the crop from that cause was very seriously injured. The Pink Eyes, Silver Lake and Black potatoe, were also affected by the disease, which has prevailed so extensively this and the last season, and the crop from that cause diminished full one third. The Kelseyites and the Rohans escaped the disease. In looking over an agricultural work, containing experiments in agriculture, made in Ireland, under the direction of the Dublin Society, in 1773, I find that the *curl* existed at that time in Ireland. The remedies there recommended, *is change of seed every year* and planting *whole potatoes*. It is there said to have been successful.

In the field of corn alluded to, I planted four rows of potatoes, same kind of seed as the other. These grew finely, were not injured by the curl, nor were they diseased. Their growth and yield equal to the most favored seasons. What was the cause of this difference? Had *the salt any influence* upon the potatoes, and were they benefited by it?

The fact is interesting; and I give it in hopes it may lead to further investigation, and perhaps to some useful result. Yours,

B. P. Johnson.

Rome, N. Y. Dec. 7, 1844.

SUBSOIL PLOWING.

Col. Sherwood, of Auburn, made use of the subsoil plough the past season on fifteen acres. A part of the subsoiled land was planted to corn, and a part sown with wheat in the fall. The soil was loamy, and the subsoil hard clay and gravel. He used the subsoil plow. It required four oxen to draw it, and to work to the best advantage at the depth it was run in this case, which was one foot Col. Sherwood thinks there ought to be six oxen. The team worked over from an acre, to an acre and a quarter per day. The ground had not been ploughed for thirty years. It was naturally wet, so much so that in a wet time, that the water would stand on it to the injury of the grass. The effect of the subsoiling was to render the soil and subsoil so friable, that the water immediately found its way through, and though a portion of the past season was very wet, the water at no time remained on so near the surface as to do the least damage to the crop. That part which was put to corn, was first planted on the 20th of May, but the seed failed, and it was planted again on the last day of May and first day of June, and grew so vigorously that it got ripe as soon as other corn in the neighborhood. Several strips of twenty to thirty feet wide were left through the field *not* subsoiled. The difference in favor of the subsoiled portion, was very obvious in the ranker growth and larger size of the corn on that part—it was so plain that it might be seen to a row. The different portions were not measured separately at harvest time. The effect of subsoiling on the wheat crop, cannot be told at present.—*Albany Cultivator.*

CORRECTION.

Dorchester, Jan. 22, 1845.

Mr Breck—Sir—In the article in your last, copied from the Albany Cultivator, giving some account of my system of soiling, it is stated that "rye is the first thing fit to eat in the spring—that it may be commenced on as soon as it is high enough to mow, and that it will continue to grow till the usual time of maturity, by which time the corn, is fit for use." The writer, in this, is not entirely correct, because there is a time *after* the rye is too far matured for profitable feeding, and *before* the corn is fit for use, when clover, cut green, is used for a period of three or four weeks.

The writer also states that "the *white* carrot is the kind most cultivated, and generally yields 800 to 1000 bushels per acre." That gentleman saw the crop while growing: when harvested, they were carefully measured, and the produce was 880 bushels to the acre. C. N.

Value of Irrigation.—A small field of poor and almost valueless land, in Scotland, being irrigated, the second year the burthen on an imperial acre being weighed, it was found to have yielded 9,680 pounds of well dried hay.—*Amer. Agricult.*

From the Albany Cultivator.

EXPERIMENTS IN THE CULTURE OF INDIAN CORN.

We are indebted to our friend, Geo. Geddes, Esq. of Onondaga county, for the following detailed account of several experiments made by him, with great care, the past season, in the culture of Indian corn. They will be read with interest, and our readers will be glad to learn that these experiments will be continued with the same exactness the ensuing season. Mr Geddes says:

The soil is a deposit of gravel mixed with sand and clay, resting upon a gypseous shale. The previous course of cultivation has been as follows, viz: In 1837, a crop of corn was raised on a heavy sod turned under that spring, and slightly manured with barn-yard manure. The yield was estimated at 65 bushels to the acre. In 1838, corn was again raised, and without any manure: estimated to yield 50 bushels to the acre. In 1839, it was sown with oats, and yielded a very heavy crop. Grass-seed was sown with the oats, which succeeded well. The next four years it was pastured. Plaster was put on both corn crops, and on the oats, and once or twice on the pasture.

The ground was plowed about the first of May, 1844, six inches deep, and planted on the 3d and 4th days of that month.

The variety of corn was the improved Dutton: that is, Dutton that had been selected from the earliest ears for a series of years.

Experiment No. I.

One acre was planted in hills three feet apart each way, six kernels in the hill. Fifty loads of half rotted manure was put on this acre, after it was plowed, and harrowed in as well as it could be done; it being so coarse that it piled up a great deal before the harrow. The hills had a hoe-full of the best of the manure drawn in by the planter, and the corn dropped into it. It was hoed twice, and a cultivator was run once along each row, both ways, at each hoeing. The account of the cost of cultivation is as follows, viz:

To plowing and harrowing one acre,	$1 50
50 loads manure, drawing and spreading,	12 50
2 days' work of one man planting,	1 50
Cultivating for both hoeings,	50
Hoeing twice, 3 days' work,	2 25
Harvesting, 3 1-2 days' work,	2 63
	$20 88

Product, 70 1-2 bushels—at 4s., $35 25.

Experiment No. II.

The other acre was cultivated as follows: One-tenth was planted in hills three feet by two apart, six kernels in a hill, and *without any manure.* The cost of cultivation by the acre, was $9 12

Product, 60 1-4 bush. per acre—at 4s. 30 12

Experiment No. III.

Another tenth was planted the same distance apart, and the same number of kernels in the hill as the last, and was manured by filling each furrow as it was plowed, full of barn-yard manure, *unfermented;* the amount used being at the rate of 150 loads to the acre. The cost of production to the acre, was $29 37

The product, 70 bush. to the acre—at 4s. 35 00

Experiment No. IV.

Another tenth was the same distance apart, and had the same number of kernels in the hill as the last, and manured with coarse manure in the same

way, and had beside, a top-dressing of half rotted manure, at the rate of 25 loads to the acre. The cost of production by the acre, was $36 37
Product, 80 bush. to the acre—at 4s. 40 00

Experiment No. V.

Another tenth was planted in drills, three feet apart, the corn four inches apart in the drills. It was manured with 25 loads of half-rotted manure, to the acre, put on after the plowing. The cost of production per acre, was $18 75
Product, 55 bush. to the acre—at 4s. 27 50

Experiment No. VI.

The remainder of the ground was planted in hills three feet by two, six kernels in the hill, and a top-dressing of 25 loads half rotted manure to the acre. Cost of production per acre, $15 56
Product, 65 1-2 bush. per acre—at 4s. 32 75

These experiments were made chiefly to determine *how thick* corn should be planted—what is the most convenient form to place the plants—and whether the manure should be rotted and applied to the surface, or plowed under unfermented. The conclusion that now appears likely to be arrived at is, that hills three feet by three feet apart, put in rows, so that a cultivator can be used both ways, is the most convenient form for planting, and that six kernels in each hill, will make the corn thick enough. I counted and made examinations that satisfied me, that at harvest, my hills averaged five stalks: no thinning was done, except by insects and accidents. That this is not too thick, is proven by experiment No. 6, where the hills were three feet by two feet, the product being 65 1-2 bushels to the acre, and with one-half the manure that was put on No. 1, which was three feet by three feet apart, and the product only five bushels more to the acre. In fact, I believe that more bushels with the same manuring, would have been raised with the hills two by three feet, than three by three feet; but the extra labor of planting, hoeing, and harvesting, will more than counterbalance the gain.

The labor required to plow under *unfermented* manure, in any considerable quantity, is so great, and the fact that it is not felt until late in the season—and that the next plowing must be deeper, in order to bring it all up and mix it with the soil—are great objections to its use.

Some of the results obtained by these experiments were unexpected. I know not why a hundred or more bushels to the acre were not raised in experiment No. 4, with manure both on top and under the furrow, amounting to 150 loads of coarse and 25 loads of fine to the acre; and that, too, alongside of land that *without any manure*, yielded more than 60 bushels to the acre.

I purpose the next year, to plant all this ground with corn, and carefully measure the product of each piece, with a view of learning the effects of this manuring for the second year.

GEO. GEDDES.

☞Physicians say, "Keep a dish of water on the stove."—*Exch. pap.*

So does common sense. It is seldom that we hear of men, of any profession, agreeing with common sense—but it is so in this case. By the evaporation of water, that portion of the atmospheric air which is taken away and consumed by fire and animal vitality, is restored, and the air made fit for inhalation.—*Amer. Eagle.*

USE OF LIME.

In the State of Pennsylvania, lime is extensively used as manure; the effects of it have been felt in the greatly increased production. Doct. William Darlington, formerly a member of Congress, is well known both as a practical and scientific farmer. The following extracts are from Dr. Darlington's late address before the agricultural association of his county:—

"The *farmer*, then, must go earnestly to work, to perform the duties of *his* department. The first step is to enrich his land: and this, as I have intimated, is best accomplished by plowing no more ground than he can thoroughly manure. To accumulate manure must, therefore, be a leading object. The chief element of manure being vegetable matter, the production of that material, on exhausted soils, is necessarily slow and tedious; but we have found a powerful and valuable auxiliary, in that process, in the application of *lime*. This mineral, judiciously applied, is known to be highly favorable to the growth of the natural family of grasses, and especially of the more valuable species of that family. By an increase of those grasses, we are enabled to keep a more numerous stock, and thereby to augment the quantity of barn-yard manure enhances the beneficial influence of the lime? for lime has ever the best effects in conjunction with manure,—and the dose of that mineral may be gradually heavier, as the soil becomes richer.

The application of lime for the improvement of land is, perhaps, more universal—and its advantages better appreciated among the farmers of Chester county than in any other district of our country. The practice there, for many years, has been to apply quick lime—slacked so as to reduce it to a powder, on the grounds which have been prepared for Indian corn. This was long supposed to be the most appropriate time for applying it—and it is still generally observed; but experience has demonstrated, that the application *never* comes amiss—that it is beneficial at *all times*; and the maxim now is, to *be sure and put it on*, some time in the year. Of latter years, some of our best farmers have adopted the practice of using lime as a top dressing, on their meadows and pasture grounds—for every field, in its turn becomes a *meadow*, after the wheat crop—and I am strongly inclined to the opinion that this will be found the most advantageous mode of applying it. It mingles directly with the dead vegetable matter on the surface, and thus, as I suppose, improves the quality of that refuse herbage, as a manure. It moreover exerts a salutary influence upon the *turf*, or sod, in stiff clay soils, by mellowing it—and otherwise improving its condition. Another advantage attending top dressings of lime on grass lands, is, that they can be applied at the seasons of greatest leisure and convenience to the farmer. On the whole, therefore, I believe this method entitled to the preference; or, at least, is worthy of the consideration of practical agriculturists. Indeed, there is reason to believe that the top dressing—even of the driest and lightest manures, or of straw, itself, produces a more signal effect upon the growth of the valuable grasses, than results from the same materials when buried by the plough; and the subject deserves further investigation.

The *quantity of lime* employed in agriculture, on a given surface, should be regulated by the *quality of the soil*. On sterile or exhausted lands, where the vegetation is scant, the dressing should at first be light, yet gradually increased, as the soil improves. Thirty bushels to the acre, equally distributed, may be sufficient at the commencement: but, as vegetable matter accumulates, the quantity of lime may be enlarged, by degrees, to sixty or eighty bushels to the acre. Some of the best Chester county farms will bear one hundred bushels per acre, with advantage; and it is remarkable, that the very soil which overlies the limestone rock, will bear the heaviest dressings of that mineral.

If I might here venture at a *Chester county prescription* for the treatment of an exhausted farm, I would say to its occupant, make your fields small, or at least, plough only so much as you can manure well, when it comes to be laid down in wheat, timothy and clover: give your Indian corn field a moderate dressing of lime, preparatory to planting. The intermediate crop, between the Indian corn and wheat, may be oats, or barley, as the quality of the land may warrant; and when the wheat crop comes off, apply a top dressing of lime on the young herbage—of clover and artificial grasses—among the stubble. Proceed in this manner with each small field—or so much of each field as you can do justice to—in succession: and in the mean time, as ability permits, apply a top dressing of lime to such other fields as are to remain a few years undisturbed by the plough. Let your stock be of the most valuable kinds—and if they are not so, go on selecting the best, until they all become of that description; but keep no more than can be *well kept*: and so manage your stock and the vegetable products of the farm, as to make the greatest possible quantity of manure. These are, in brief, the directions which have been found to answer upon the worn-out lands of Chester; and I presume they will prove equally successful in all cases, of similar soil and climate."

Broom Corn—The seed is excellent to fatten Sheep.—Albert Hibbard, Esq. of North Hadley, tells us he makes use of all the seed of his broom corn to fatten sheep—that they are very fond of it and will fatten better on this than on Indian corn. Broom corn is raised in great quantities in the river towns, where the brooms are made up and distributed to all quarters of the country.

We have often raised the corn for the sake of the brush, but we have never made much account of the seed, though hens are always fond of it. Hogs too will eat it, though we think it has seldom been converted to meal for hogs. Mr. Hibbard thinks the broom corn seed more valuable for sheep than oats or any grain, pound for pound.—*Boston Plough.*

Mass. School Returns.—From the abstract prepared by Hon. Horace Mann, it appears that the whole number of children in the Commonwealth between the ages of 4 and 16 is 192,021. Amount raised for the support of schools, including the income of the surplus revenue $558,197 23, being nearly $41,000 more than was raised the previous year. $37,951 90 are contributed for board and fuel, making an aggregate for common school purposes of $596,149 13. The amount raised in Essex county is $66,309 55. Somerville appropriates $7,62 to each child, and stands at the head of the towns in the State; Richmond appropriates $1 03, and stands at the foot.

The Southern Cultivator, at Augusta, Ga., has doubled its size, and deserves to have its subscription list served in the same way.

POTATO DISEASE.

The following communication was addressed to the Hon. Levi Lincoln, as chairman of the Legislative Agricultural Association, who placed it in our hands for publication in the Farmer, if deemed worthy of insertion. We know that our readers, and the agricultural community in general, are anxious to get all the information upon a matter so deeply interesting to the farmer, and we are, therefore, glad to have it in our power to present the views of those who have devoted attention to the subject, although their theories may not meet our assent. In the present case, we do not agree with the writer as to the cause of the disease. A scientific friend to whom we submitted the article, thinks the writer's idea of the carbonic acid of the atmosphere, is not sound,—that to ascertain to a nicety the quantity of carbonic acid in a given portion of the atmosphere, is an experiment of the greatest difficulty, and could not be managed as easily as he thinks; nor would it lead to the desired result, although it is well ascertained that a large excess of carbonic acid is injurious to vegetation.—Ed.

South Boston, Jan. 18, 1845.

Sir—Having heard the greater part of the discussion on Tuesday evening, I have taken the liberty of addressing you on the subject, the interest you take in the success of agriculture, leading me to believe it is a liberty you will excuse.

I had not the pleasure of hearing the gentleman who first spoke on the subject, [Mr Teschemacher,] but from the observations which were made by the different speakers, I was led to the conclusion that he had assigned no cause for the disease. [A mistake.] From all that I could learn, there has been no particular system of manuring or cultivation adopted that has been entirely exempt from the disease, unless we except the case mentioned by Mr Cole, where lime was used in the hill, and a small quantity afterwards spread on the surface, and the other of a gentleman at New York, where pulverized charcoal was used. But even these cases, as I did not hear of the same course of cultivation having been pursued in other places, I am almost inclined to class among those fortunate places that the destroyer spared, and to look in another direction for the origin of the disease.

My observations of the disease are entirely confined to England, as I did not arrive in this country till after the crop was housed; and as I left there before the great bulk of the crop was raised, my remarks will be confined to what fell under my own observation.

On the 27th of May, I planted in my garden 40 square yards with blue potatoes, the manure on which had been dug in in the autumn, the ground being lightly forked previous to the planting. This, I may observe, is rather later than potatoes are usually planted. The vines came on very well, and up to the beginning of August, there was every appearance that I should have a good crop. But about this time, we had several days of very hot weather, with the wind in the North east, and the nights exceeding cold. About three or four days after this weather commenced, I perceived that several of my currant trees were attacked with honey dew, and these potatoes in particular, the tops of the vines being all curled up. In a few days, the vines were covered with green aphides, and in about two weeks the vines all died, (some in a day or two,) parting at the root the instant I laid hold of them. I immediately dug them up, and I had not a peck from the plot: there were none larger than marbles, and they did not appear to have grown from the time that the honey dew had come on them. I did not perceive any disease in the potatoes, and I threw them to the pigs. The seed was from quite a different soil. At about three yards' distance from the above, with a row of currant bushes between them, and with another row between them and the sun, I planted, on the 6th of May, an earlier sort of potato. These were not in the least affected with honey dew, and were an excellent crop. I had not perceived any aphides previous to the honey dew, but I was led to expect them, having always observed that the hop plant, which is very liable to the attack, always (unless heavy rain or thunder showers immediately follow it,) becomes what the planters term lousy. Several of my neighbors' crops that were planted late, were cut off in the same way, and some of the early ones suffered, but not to such an extent. How those have kept that have been raised, I cannot say.

My opinion, deduced from these observations is, that the disease proceeds from atmospheric action, the first symptom of its attack presented to our notice, being the honey dew. This dew, as it is called, I conceive to be caused by a sudden current of cold coming in contact with the plants at a time when all their pores are open, and they are in a state of what may be called perspiration: the suddenness of the attack prevents the plants from accommodating themselves to the temperature of the surrounding atmosphere, and the pores are suddenly closed; the exudation on the leaves and vines is not taken up by the atmosphere, but becomes fixed on the plant, hermetically sealing the pores; and, as in the animal, so in the vegetable economy, disease is produced. The roots, therefore, being cut off from their supply of carbon through the vines, direct all their energies towards the diseased parts, and the tuber no longer receiving any nourishment from them, and being unripe, it is not in a condition to dispense with the nourishment, and becomes diseased, the extent of the disease being regulated by the maturity of the tuber at the time of the attack.

If it is asked how do I account for one portion of a field being affected and not the other, my answer is, that the intensity of heat or cold with which a current of air is felt by any body, is always regulated by the temperature of the body so acted on: thus one portion of a field may, from the nature of the soil, its situation, or the extent to which it is covered with any vegetation, have radiated heat in a greater or less degree than other parts, or the current of air might not have been of that width as to take in the whole field, or it may have crossed it in a particular direction, or it might have been more sheltered in the direction from which it came. I did not observe that any of the speaker said that a plot here and there in the same field, was affected, but it was either one side or one end, or the whole of the field was affected—showing, I think, sir, that the current of air proceeded in a direct line.

Presuming that the disease proceeds from the causes I have stated, and as from the experiments of Liebig and DeSaussure, it has been proved that winds blowing from a cold point, contain a greater portion of carbonic acid than those from a warm one, the question may be asked—Do plants, though they take from the atmosphere the carbonic acid which would be injurious to man and animals, when they have the carbonic acid presented to them in what may be called an excess, or at a time when they are not in a condition to take it properly into their system, become what may be called surfeited with it, and so sicken? This question I must leave for those better skilled in the physiology of plants than I am, to determine. Presuming, however, such to be the case, the question then arises, what effect will be produced (as in the case named by Mr Cole,) by the sprinkling of a small quantity of lime among the plants, which by its affinity for the carbonic acid, may assist the plant in depriving the current of air of its constituent parts and possibly change its temperature. This is an experiment which I really think is worth trying, and which might be done by almost any practical chemist having the means at his disposal. There is another plan which I should try, if I ever perceived a similar attack, and that is, to cut the vines off as far as they were affected, with a sharp knife, and throwing a litile soil or dust on the part, to check the bleeding, removing the vines so cut to the compost heap. My reason for thinking that this would have a beneficial effect is, that last May, my early potatoes were cut off by a severe frost, the greater part of the vines turning quite black. I immediately applied the knife to the greater part of them, in the same manner as I have recommended above: the result was that those that were cut gave a fair average crop, while the others either died away or shot out short brusny tops, and the produce was scarcely worth getting up. Several of my neighbors, on my recommendation, pursued the same plan, and with the same result.

My letter has extended farther than I expected, but it is a subject I feel so much interest in, I could scarcely say less. Apologizing for taking up so much of your valuable time with the perusal, I remain, sir,

Your very ob't serv't,

R. LAWRENCE.

Hon. Levi Lincoln, *Presd't, &c.*

KENNEBEC CO. AGRICULTURAL SOCIETY.

To the Committee on Crops:—Gentlemen—The crop of corn entered by me for the Society's premium, was raised on my farm in Readfield, in 1844, on two acres of land. It was a piece of grass land, pretty well run out for grass. Early in the spring of 1843, I broke it up and planted it with corn: the worms troubled it very badly, so that I had a very small crop. We took off the corn, and nothing more was done to the land till the spring of 1844. We then plowed the ground, harrowed it well three times, and furrowed it 3 1-2 feet wide. We then dropped a good sized shovelful of my compost manure 2 1-2 feet apart, for the hills, and we did so the year before; we then covered the manure with a little dirt, and dropped about six kernels in a hill, three beans on the side of the hill, and one pumpkin seed in every third hill of every third row. This we did the second week in May. The first of June my corn was up and looked well. We then put on a large table-spoonful of ashes to each hill, then hoed it well, and it was not touched by the worms. About the 20th of June, we half-hilled it, without the use of a plow or a harrow; the corn then bade fair for a good crop. About the middle of July, we went through the corn, cut up the weeds, and sowed English turnip seed on every missing hill. About the 20th of August, we topped the stalks. On the first of September, we pulled the beans and stacked them in the field. The first of October we gathered the corn. Product—

One hundred and twentytwo bushels of good sound corn, worth 75 cts. per bushel, amounting to	$91 50
Twelve bush. pig corn, worth	4 50
One large load of stalks, worth	5 00
Four large loads of butts, worth	12 00
Twelve cartloads of pumpkins, worth	12 00
Eight bushels of good white beans, worth	12 00
Thirtytwo bushels English turnips, worth	8 00
	$145 00
The whole number of days' work by men's labor, from the time we begun to plow till the crops were all gathered, was 42, at four shillings per day, making	$28 00
Four days' work with one yoke of oxen, at four shillings per day, making	2 67
Three days' work with one horse, at 50 cts. per day, making	1 50
Sixteen bushels ashes, worth ten cents per bushel, making	1 60
One cask plaster, cost here	2 00
Ten cords of my compost manure, worth $1 25 per cord, making	12 50
Twelve quarts seed corn, worth	40
Eight quarts seed beans, worth	37
Turnip seed worth	06
	$49 10
Total of value,	$145 00
Total of cost,	49 10
Net profit,	$95 90

DANIEL CRAIG.

To the Committee on Crops:—Gentlemen—The crop of oats entered by me for the Society's premium, was raised on my farm in Readfield, on two acres of land where I had potatoes last year. I manured the land well before planting the potatoes, but no manure was put on the land this year. It is a piece of light loamy land, with deep soil. We plowed the ground and sowed the oats in May. I sowed the common English oats, three bushels to the acre, harrowed them in well, and rolled with a large roller. Nothing more was done to the oats until August, when we mowed and dried them well, and then carried them to the barn, where they were threshed by F. Dudley's threshing machine, and there was 152 1-2 bushels of well cleaned oats, being 76 bushels and 1 peck to the acre, worth 25 cents per bushel. The whole on the two acres amounting to $38 12

Four tons of good oat straw worth $3 per ton,	12 00
	$50 12
Men's labor ten days, plowing, sowing, harvesting, and thrashing,	$6 67
Paid four cts. per bushel for thrashing,	6 10
Sowed six bushels of oats, worth	1 50
	$14 27
Total of value,	$50 12
Total of cost,	14 27
Net profit,	$35 85

—*Maine Far.*] DANIEL CRAIG.

Shell Fruit, as walnuts, chestnuts, &c. may be preserved for a year or two by being divested of heir outer shell, and thoroughly dried.—*Gar. Chron.*

AGRICULTURAL MEETING AT THE STATE HOUSE—Tuesday Evening, Jan. 21.

Hon. Levi Lincoln, in the Chair. Subject—*What is the Best Mode of Managing Grass Lands?*

Mr Buckminster opened the discussion. He began by contrasting the comparative value of the grass with the grain crop. He thought the grass crop of much more importance than that of grain. He remarked that much had been said on the raising of wheat, but he thought it could not be raised with profit in one town in twenty, in the State, and even in Maine, on clayey soils, the quantity raised was small to what it has been, and without the bounty could not generally be raised. He thought it better to purchase grain than hay, as the former could be raised at the West, and transported to New England cheaper than it could be raised here. Grain was a great exhauster of the soil: grass exhausts the soil much less, and he even doubted whether it exhausted it at all. He thought the most profitable kinds of grass to be cultivated among us were red-top, herdsgrass, red and white clover. He remarked that the Tall Meadow Oatgrass possessed good qualities, but one great objection to that was the cost of the seed. He had sown 6 bushels to the acre, which cost him $3 per bushel. It endures a number of years, being more permanent than herds-grass, and succeeds best on a light gravelly soil. It ripens the middle of June, and if sown with Southern clover-seed, they will be fit to cut at the same time, but as the grass is not known in the market, and he does not like it as well as herds-grass, even were the seed cheaper he should not recommend it.

Within a few years, it had been customary to sow herdsgrass, red-top, &c. on low lands, which were formerly thought unfit for the purpose, but it was found that by draining, they produced abundant crops, but the quality of the grass was not so rich as that which grew on high land, nor was the after feed so good.

There were various modes of improving meadow land—some were expensive, and others of little cost. He knew an instance where the first crop paid all the expense of reclaiming. A cheap mode of subduing was by paring and burning, where the meadow is of such a nature as to burn freely, after it has been drained. In this case, the ashes will be sufficient to give 2 or 3 good crops of hay. Another mode was to cover with gravel, where the plow would not go. If the surface is pretty even, an acre can be covered for 15 or 20 dollars, if the gravel is handy. He thought covering an effectual way of killing the grass, and that gravel was a much better material than sand, which on wet land, made the soil too compact: he thought clay on light meadow soils, a good material. He considered the month of August the best time of the year for this work. He had given a hired man for his stent, an acre to cover in a week, with the help of a yoke of oxen. He remarked that two men with wheelbarrows, would do the work in the same time.

To prevent coarse grasses from coming into reclaimed lowlands, it was necessary to give top-dressings: they would thus be kept in good heart, longer than high lands, and were not so liable to suffer from drought.

The best season for plowing lowlands was in the summer, and they should be sowed down to grass-seed alone in August, giving the land a good top-dressing of manure, and seed well, and it was sure to take. He said it was the practice of many farmers to lay down their land to grass in the spring, by sowing grass-seed and grain together. This he thought a bad practice, for in dry land, and in dry seasons, after the grain is harvested, the tender grass was sure to be burnt up by the scorching sun, and the labor, as well as the grass-seed, was lost.

There was one mode of seeding down to grass, which Mr B. said he calls "*our new husbandry*," and that if he was not the originator of the mode, he had practiced and proclaimed it for many years. Adam, Solomon, and others in more modern times, might have been acquainted with it, and he had understood that Mr Morrill Allen, and others, had practiced it.

It was formerly supposed to be necessary to pulverize the soil, but by this *new* mode, it was easier to keep the land in heart. The process is, turning over the green-sward, putting on a top-dressing, rolling it close, and sowing it down with grass seed in August. It succeeded best on low land.

Hon. Morrill Allen, of Plymouth, said he loved the grass-field as a place of recreation, and often amused himself by running over it, notwithstanding his age. When he commenced the business of husbandry, he was ignorant of every branch of it. He bought his farm on credit, and his means were small; but he manured liberally, renovated his fields, and procured good hay. As his means increased, he purchased a team, and plowed up his grass grounds, and pulverized the soil, according to the old practice, and sowed his grass-seed with grain in the spring, and when the season proved a dry one, there would be a failure of the grass-seed, and consequently the loss of the crop. At length his eye fell upon a communication from Mr Phinney, who represented that he had been in the practice of turning over his lands that were heavy, and seeding down to grass in August. Mr A. thought it a valuable course, and first plowed a small piece, which succeeded so well, that the next year he plowed more. He said he now had a field which was treated in this way in 1825, that has received a top-dressing every other year, and now cuts from 1 1-2 to 2 tons per year to the acre from it.

He could not admit that Mr Buckminster was the *inventor* of this mode. It was a good practice, however, and the origin of it was not so important as the imitation.

The kinds of grass farmers should cultivate, depends upon their situation. For his part, as he sold a great deal of English hay, he found herdsgrass to be the best, as it was the most saleable, more easily managed, made easy, seldom mowburns, and if necessary, to keep over a year, did not receive injury. His practice in managing his grass lands was to top-dress every other year. He did not always get manure enough to go over the whole. He was obliged to use a great variety of materials for his compost: he used every thing that formed a contrast to his soil. On his heavy soils he mixed with his composts sand or loam, and on his light soils the most tenacious mud. There was no restriction to the size of his manure heap, and although the quality might be inferior, and deficient in strength, compared with that carted out of the city, it kept the land in heart, notwithstanding. For forty years past, he had sold 5-7ths of all the grass grown on his farm: he thought he cut more hay now than he did on the same fields 30 years ago. He said many call it impoverishing to a farm to sell hay, but he remarked, "it was said hunger would break through a stone wall," and he was compelled to sell hay, to pay his taxes, meet his interest, &c. [*See next page.*]

NEW ENGLAND FARMER,
AND HORTICULTURAL REGISTER.

Edited by Joseph Breck.

Boston, Wednesday, Jan. 29, 1845.

DISCUSSION ON THE MANAGEMENT OF GRASS LAND.

[*Continued from the preceding page.*]

Mr Allen was sorry to hear the remarks from Mr Buckminster, relative to the comparative value of hay and grain, in which he discouraged the culture of the latter. Mr A. thought it for the interest of the farmer to cultivate grain: some sorts were almost indispensable to the progressive improvement of the farm.

Rev. Mr Sanger, of Dover, said he had visited Mr Allen's farm, and the improvements made on it excited his admiration. It surprised him to see how much had been done with little outlay.

The Chairman suggested that the improvement of pasture land might be included in the scope of discussion, and inquired, how are pastures to be kept good and continued long in grass? and whether they would deteriorate if grazed many years in succession? and if so, in what way shall they be restored? In many parts of Worcester county, some graziers are in the habit of turning in early and late. He had heard complaints that pastures were running out, and believed that over-feeding and over-stocking were the cause of it. It was his opinion that if a pasture was not overstocked, it would be improving. He has a pasture which had been plowed but once, probably, since the settlement of the country, and that about 30 years ago, when a crop of rye was raised upon it, and it had been continually improving until within a few years, when it had deteriorated, notwithstanding cattle had been put in over night. In order to renovate it, he had adopted the English practice of scarifying—that is, by going over it with a spiky roller, followed by a common roller, having previously applied a compost of good quality. The result had been favorable, the produce last year being two fold what it was the year previous. The last fall he had tried an experiment still more severe: he applied a compost to a pasture, the soil of a hard, slaty character, and rather dry, and with a sharp harrow passed over it, tearing up the roots of the grass, and then leveled it with a smooth roller. He used no seed. The result was, that before the pasture was covered with snow, it looked like a fresh rye field. He thought this mode of managing grass lands, which were not often plowed up, would be beneficial. He considered the practice had some analogy to root-pruning in fruit trees: the effects of the harrow on the roots of the grass were the same.

Mr Gleason, of Wayland, said he had made an experiment on a dry soil, with a common harrow, without any top-dressing, and sowed grass-seed, but was disappointed in the result. He fed it one year, and the 10th of June of the summer following, he sowed it down to winter rye, kept his cattle off a fortnight, and it produced twice as much feed that summer as old land beside it. In August following, he turned it over with the plow, and sowed it down to winter rye and grass seed. The rye affords early feed in the spring until the grass is grown. Mr G. said he resorts to every means to increase his compost heap—from the woodlands he gathers leaves and decaying boughs, which are carted into his barnyard: he uses soil everyday in his stable, to absorb the liquid manure, and carts large quantities of it into his yard: in August, he hauls 50 or 60 loads of peat mud, which is also deposited in his barn-yard; keeps his swine in the cow-yard; scatters corn over the yard and plows it in, and let the hogs root it over, which makes it very fine.

Rev. Mr Sanger remarked that he understood the late Fisher Ames could make manure out of every thing except junk-bottles.

Hon. Mr Foote said if the gentleman had read agricultural papers, he would have learned that a farmer in New York had ground up old bottles and used them for manure.

Mr H. A. Bridgman, of Belchertown, was glad to learn that glass bottles could be used for manure, as it might be promotive to the cause of temperance. Mr B. said he had wet lands on his farm, and found no difficulty in bringing them to, when the water can be drained off. On boggy lands, where he could not use the plow, he cut off the bunches with a bog-hoe, and carted on sand, and by this process, lands which four years since, were not worth $10 per acre, were now worth $100, and produced two tons of good hay. He was not in favor of close cropping, and thought that any common land would hold its own, provided one crop only was taken annually. He believed it bad husbandry to suffer the aftermath to be cut or fed off in the fall.

Mr Fay, of Southboro', said he was in favor of book farming; that from his youth he had been engaged in agriculture, and always took pleasure in reading agricultural books and papers, notwithstanding some of his friends thought he was running mad by reading so much. If more books and papers were read by farmers generally, the State would be benefited by it. His farm formerly contained much natural mowing, which could not be easily plowed. To improve this, he formerly carted his manure upon it in the fall, and spread it in the spring. But experience had taught him that it was better to spread the manure as soon as it was carted into the field in the fall. For the last four years, he has improved his uplands by carting out the stone, (of which he has an abundant crop,) plowing, manuring, and seeding down to grass in August: these lands, which were bushy, rocky, and cold, and not worth $10 per acre, now pay the interest of $200 He thought there was nothing more injurious to pastures than close feeding: has known the best of pastures reduced and almost ruined by pursuing such a course. He mows his land 5 to 7 years, and gets good crops: sows plaster, and then pastures 4 years. He is not in favor of taking the aftermath from his grass fields.

Mr Allen, in allusion to what had been said about root pruning, remarked that a neighbor of his had informed him that he had an old unfruitful orchard, to which he gave thorough plowing, so as to break the roots of the trees as much as he could. The effect was, the last season he had an abundant crop of apples.

Mr A. spoke of his practice of taking off a crop of spring grain (on land which had been manured the previous year for a crop of corn,) plowing in the stubble, and sowing down to grass-seed in August. On lowlands, as soon as he has taken off the crop of grass, he plowed it evenly, put on compost, sowed grass-seed, applied the roller, and the next year he had a full crop of grass. In relation to pasture land, he was pleased with the course pursued by the chairman. In respect to the aftermath, his experience was not in accordance with those who have spoken on the subject: he thinks it should not be suffered to remain: he would rather have his fields mowed two or three times: often takes away the aftermath when the crop does not pay the expense of cutting: thinks we can do better by converting it into manure. He had visited Mr Fay's farm, and found it very rocky, and thinks he has taken the most eligible course. He had certainly obtained a large crop of rocks. He was not in favor of burning meadows, as alluded to by Mr Buckminster, as too much of the vegetable matter was consumed.

Mr Buckminster said he would be understood that where there was a peat bottom, there was no danger in burning: he thought a man without a capital, might in this way get a few crops without much expense.

Mr J. W. Proctor, of Danvers, said that the hay crop of Ipswich, was of great importance; that he had been informed that 1000 tons were annually sold from that place: the practice there was to harrow the fields after the crop was taken off, and sow in grass seed: the soil of a clayey character. Some of the best farmers in Danvers, were in the habit of sowing grass seed among their Indian corn, at the last weeding, (it being cultivated without hills,) and they obtained abundant crops of grass the next season. The new mode, usually called the Phinney system, has been practiced among his friends in Danvers for many years, with great success. He said Gen. Sutton, of Danvers, who has a fine grass farm, receives a net income from it of $750 yearly. He keeps one hand through the year, who is mostly employed in collecting manures. Much is obtained from the tanneries.

The editor of this paper observed that he had been over Gen. Sutton's grounds, and was surprised to see how well he managed his farm, keeping it in so high order, with so little stock. He believed he had only eight head of cattle. He cuts about one hundred tons of hay on 40 acres of mowing—sells all his first crop, and keeps his cattle on the second crop. He hired one man the year round, one for six months, and a few extra hands in hay time.

[We were informed by Gen. Sutton that he had practiced the Phinney system for more than twenty years, and that was the secret of his success. As soon as the land began to be less productive, he inverted the sod, and sowed grass seed as described.]

Mr Earle, of Worcester, said he had not heard from any gentleman who had spoken, the proper quantity of grass seed to be sown to the acre.

Mr Allen replied that farmers seldom use too much. The quantity depended on soil and preparation. The less manure and poorer the soil the more seed was wanted. He puts 14 quarts of herdsgrass and 8 to 10 pounds of clover to the acre. He never sows clover seed in August, as it is apt to winter-kill.

Mr Earle said he would state a single circumstance: when he was a young man, and worked on the farm with his father, they were engaged in sowing a field with redtop seed. He began on one side, his father on the other. Not having much experience in the art, it was found after sowing one strip through the field, that he had applied a double portion, and if he continued to sow so liberally, there would not be enough to go over the field; so in the next strip he reduced the quantity. The consequence was, where the grass seed was sown thick, the crop was much heavier, and continued to be so for 5 or 6 years.

Hon. Mr Foote remarked that he thought he stood at the *foot* of the class, but would speak on the subject of improving grass lands by irrigation. He said there were but few farms so situated but that portions of the grass land might be benefited by the waste water from the roads, cattle yards and rising grounds: these waters were laden with the farmer's riches. He thought a very great profit might often be derived by a small expense. By a single dollar's expenditure, he had turned water upon a couple of acres by which the crop was increased to two tons per acre. Water from the roadside was rich in salts and fine particles of mould.

The subject proposed for discussion at the next meeting was—The Indian Corn Crop.

☞Our grateful acknowledgements are due to Dr. C. T. Jackson, for his "Final Report on the Geology and Mineralogy of the State of New Hampshire." It is an elegantly executed folio volume, of nearly 400 pages, embellished with fine engravings illustrating some of the most striking scenery in the State, and several geological maps. We must take another time to notice it more particularly. The Report reflects credit on the State and its able author.

Keep the feet warm, the head cool, and the heart open.

MASSACHUSETTS HORTICULTURAL SOCIETY.

Camellia Exhibition. The exhibition of Camellias for premiums will take place on SATURDAY the 15th of February. Flowers must be in the stand at 10 o'clock, A. M. The premiums offered are $5 for the best six Flowers, $4 for the second best, $3 for the third best.

JOSEPH BRECK,
Chairman of Flower Committee.

Boston, Jan. 29, 1845.

THERMOMETRICAL.

Reported for the New England Farmer.

Range of the Thermometer at the Garden of the proprietors of the New England Farmer, Brighton, Mass. in a shaded Northerly exposure, to the week ending Jan. 19.

Jan. 1845.		7, A.M.	12, M.	5, P.M.	Wind.
Monday,	20	17	37	27	N. E.
Tuesday,	21	30	30	25	N.
Wednesday,	22	24	26	25	N. W.
Thursday,	23	18	30	25	N.
Friday,	24	20	34	35	N.
Saturday,	25	37	48	42	E.
Sunday,	26	30	33	31	N.

BRIGHTON MARKET.—MONDAY, Jan. 27, 1844.

Reported for the N. E. Farmer.

At market 790 Beef Cattle, 1200 Sheep and 175 Swine. 100 Beef Cattle unsold.

PRICES.—*Beef Cattle*—Several lots of Cattle were purchased on Saturday, at last week's prices which were not sustained to day, particularly on the second quality. We quote a few Extra $5 a 5,25. First quality, $4,75 a 5. Second quality $4 a 4,50. Third quality, $3,75 a 4,00.

Sheep.—Common sheep from $2 to 2,25. Weathers from $2,25 to 4

Swine.—No lots sold to peddle. Two small selected lots to ship 3 1-2 and 4 1-2. At retail 4 and 5.

WHOLESALE PRICES CURRENT.

Corrected with great care, weekly.

SEEDS. Herds Grass, $2 00 a 2 25 per bushel. Red Top 60 to 70 cents. Clover—Northern, 10 to 11c.—Southern, 8 a 9 c. Flax Seed. $1 50 per bushel. Lucerne, 33 c. per lb. Canary Seed, $2 00 a 2 25 per bushel. Millet, 1 75 to 2 00.

GRAIN. There have been no large operations in the market since our last report.

Corn—Northern, new, bushel 00 00—Southern, round yellow, 50 a 52—Southern flat yellow, 48 a 50—do. do. white 46 a 48--do New Orleans, 00 a 00—Barley 00 a 00—Rye, Northern, 00 a 00—do. Southern, 62 a 70—Oats, Southern, 32 a 33 — Northern do. 34 to 35—Beans, per bushel 1 50 a 1 75.—Shorts, per double bush. 27 a 30—Bran, 25 a 27.

FLOUR. There has been an active demand for western Flour throughout the week, and some large parcels have been taken for the country trade: prices at the close were firm, and holders anticipate some further improvement, unless the coming supplies should prove larger than expectation.

Baltimore, Howard Street, 4 mos. cr. new, $0 00 a 4 81—do. wharf, $4 62 a 4 75—do. free of garlic, $0 00 a 0 00—Philadelphia do. 4 mos. $0 00 a 4 67 — Fredericksburg, low l'd new $4 62 a 4 67—Alexandria, wharf, 4 62 a 4 67—Georgetown, $4 75 a 4 87—Extra do. 0 00 a 5 00—Richmond Canal, $4 75 a 0 00—do. City, $5 50 a 0 00—Petersburgh, City, $5 00 a 5 50—do. Country $4 62 a 4 75—Genesee, common, cash, $0 00 a 5 00— do fancy brands $5 12 a 5 37—Ohio via Canal, $0 00 a 0 00—do do New Orleans, cash $4 62 a 4 75. Rye, $0 00 a 0 00—Indian Meal in bbls. $2 62 a 0 00.

PROVISIONS. The market continues firm at the current rate of last week.

Beef—Mess 4 mo. new bbl. $8 25 a 8 50—Navy—$7 50 a 7 75.—No. 1, $6 50 a 7 00—do Prime $5 50 a 6 00—Pork—Extra clear 4 mo. bbl. $11 50 a 12 00—do Clear $10 00 a 11 00 do. Mess, $9 50 a 10 00—do Prime $7 50 a 8 00—do Mess from other States,— a — —do Prime do do $0 00 a 0 00 do. Cargo do. 0 00 a 0 00 —Clear do do $00 00 a 00 00—Butter, shipping, 10 a 13—do store, uninspected, 11 a 12—do dairy, 14 cts. a 17—Lard, No. 1, Boston ins. 6½ a 7—do South and Western, 6¼ a 6¾— Hams, Boston, 7 a 00—Southern and Western, 6 a 6¾—Cheese, Ship'g and 4 meal, 4½ a 5¼—do new milk, 6 a 7.

WOOL. Duty. The value whereof at the place of exportation shall not exceed 7 cts. per pound, 5 per cent. ad val. All whereof the value exceeds 7 cts. per pound, 40 per ct. ad. val. and 3 cts per pound.

The sales of fleece have been made to a fair extent, at prices ranging from 33 a 47c. per lb.; pulled commands our quotations. There has been a regular demand during the last few weeks, and the stocks of dealers are sensibly diminished. Coarse foreign is in fair request, and prices remain without any essential change.

Prime or Saxony Fleeces, washed, lb. 45 a 50 c.--American full blood, do 40 a 42--Do. 3-4 do 37 a 38—Do. 1-2 do 35 a 36 -1-4 and common do 32 a 35 — Smyrna Sheep, washed, 20 a 22-- Do. unwashed, 10 a 15 -- Bengasi do 6 a 12--Saxony, clean, 00—Buenos Ayres unpicked, 7 a 10—do. do. picked, 10 a 14—Superfine Northern pulled lamb 38 a 40—No. 1 do. do. do. 33 a 35—No. 2 do do do 23 a 30—No. 3 do do do 14 a 18.

HOPS. Duty 20 per cent.

The news by the Cambria is favorable for an export demand, and holders are firm at the quoted rates.

1st sort Mass 1843, lb. 13 a 14 ; 2d do 0 a 0.

HAY, 16 to 18 per ton—Eastern Screwed $12 to 13,

EGGS. 15 to 20.

POWER PRESS FOR SALE.

For sale by TUTTLE & DENNETT, 21 School Street, a first rate single frisket Tufts' Power Press. The Press is in excellent order.

Boston, Jan. 29, 1845.

BEMENT'S AMERICAN POULTERERS PANION.

The American Poulterer's Companion — A Practical Treatise on the Breeding, Rearing, Fattening and General Management of the various species of Domestic Poultry, with Illustrations and Portraits of Fowls taken from life. By C. N. Bement, Albany. Published by Saxton & Miles, New York. For sale by JOSEPH BRECK & CO.—Price $1 25.

BACK VOLUMES OF THE AMERICAN AGRICULTURIST.

JOSEPH BRECK & CO. have received a few sets of the 3 back volumes of the American Agriculturist, elegantly bound in cloth. Price $3 75 per sett.

HOWARD'S PREMIUM SUBSOIL PLOWS.

The subsoil Plow is unquestionably the most important agricultural implement of modern invention. It is considered by the best informed practical farmers of Great Britain and our own country, as an indispensable article in the most profitable husbandry. Says that eminently skilful and intelligent agriculturist, Mr. Phinney, of Lexington: "such is the estimate in which I hold this important implement, that I should consider it a great piece of improvidence to put in a crop without first subsoiling the ground." The subsoil Plows manufactured by Mr. Howard, are of two sizes—the smaller obtained the highest premium offered by the State Agricultural Society at its late exhibition at Worcester. The committee to award the premium on Subsoil Plows, in their report say:—"The committee were pleased with the neatness and firmness of structure of these Plows—characteristics which have distinguished all the Plows of Mr. Howard that have come within their observation. *Utility* and not *show*, are their peculiar features. * * They were astonished to find with what ease and perfection the hard pan could be stirred, and broken to the depth and width of 8 or 9 inches, for such was the operation of the medium size Plows, with a power not exceeding that ordinarily required for moving a surface Plow at the same depth—and they found the Plow might be guided with less labor and fatigue than the surface Plow. * * They confidently recommend the subsoil Plow to the attention of the farmers of the Commonwealth"

The improvement in the length of the handles of Mr. Howard's Plows, suggested by the committee, has been made—and the undersigned are now prepared to furnish these invaluable implements wholesale and retail.

JOSEPH BRECK & CO.

N. E. Agricultural Warehouse and Seed Store, 51 & 52, North Market Street, Boston.

Dec. 18, 1844. tf.

BARN DOOR ROLLERS AND IRON RODS

For sliding Doors, Axletrees, Steel Springs, and Tire Iron for sale by H. RICHARDS,

Sept. 18. No. 109, State Street

GRINDSTONES ON FRICTION ROLLERS.

Grindstones of different sizes, hung on friction rollers and moved with a foot treader, are found to be a great improvement on the old mode of hanging grindstones. Stones hung in this manner are becoming daily more in use, and wherever used, give universal satisfaction. The rollers can be attached to stones hung in the common way. For sale by J. BRECK & Co., No. 51 North Market street.

TRACE CHAINS.

The subscribers have for sale a fine assortment of Trace and Tie-up Chains. JOS. BRECK & CO.,

At N. E. Agricultural Warehouse and Seed Store.

CHEESE PRESSES.

Self acting and other Cheese Presses, of the most approved kinds, for sale at the Agricultural Warehouse, 52 North Market street, by J. BRECK & Co.

HORTICULTURAL TOOLS.

A few cases of superior Horticultural Tools, for gentlemen or ladies' use For sale by JOS. BRECK & CO.

51 and 52 North Market Street.

JOSEPH BRECK & CO.,

NEW ENGLAND
Agricultural Warehouse
AND
SEED STORE.

51 and 52 North Market Street, Boston.

JOSEPH BRECK & CO. having received a full and general assortment of FIELD, GRASS, GARDEN and FLOWER SEEDS, worthy of cultivation, confidently recommend them as being pure and of the first qualities, unmixed with other varieties; they have no hesitation in saying that their collection of Seeds is the best, and of the greatest variety ever offered for sale at any establishment in the U. States.

AGRICULTURAL BOOKS of all kinds, constantly on hand.

AGRICULTURAL AND GARDEN IMPLEMENTS of all kinds, among which are the following, viz:—1000 Howard's Patent Cast Iron Ploughs, 200 Common do. do, 200 Cultivators, 100 Greene's Straw Cutters, 50 Willis' do. do. 100 Common do. do, 100 Willis' Patent Corn Shellers, 50 Common do. do, 200 Willis' Seed Sowers, 50 do. Vegetable Cutters, 50 Common do. do., 200 Hand Corn Mills, 200 Grain Cradles, 100 Ox Yokes, 1500 Doz. Scythe Stones, 3000 do. Austin's Rifles, 100 doz. Cast Steel Shovels, 150 do. Common do. 100 do. Spades, 500 do. Grass Scythes, 300 do. Patent Snaiths, 200 do. Common do., 500 do. Hay Rakes, 200 do. Garden do., 200 do. Manure Forks, 300 do. Hay do. 500 Pair Trace Chains, 100 do, Truck do. 100 do. Draft do, 500 do. Tie up do, 50 doz. Halter do, 1000 yards Fence do, 25 Grind Stones on Rollers.

JOSEPH BRECK & CO.,

N. E. Agricultural Warehouse and Seed Store, 51 and 52 North Market Street. Boston.

GARDEN AND FIELD SEEDS.

The subscribers are now receiving their fall supply of Garden, Field and Grass Seeds, and would respectfully recommend to their customers to send in their orders as early as possible to secure a supply from their choicest lots. Their stock of seeds for this season will be very full and complete, and most of the varieties being raised under their own inspection they can confidently recommend them as being fresh and genuine. Among them are Long Blood, Early Turnip and Sugar Beets; Ruta Baga, Mangel Wurtzel, Orange Carrot, Radish. Cucumber and Cabbage of sorts. Also, Peas, Beans and Squashes, which together with a large supply of most kinds of seed desirable for the field or garden, comprise the most complete and extensive assortment of seeds to be found at any similar establishment in the country. JOSEPH BRECK & CO.

Oct. 2.

MILK ESTABLISHMENT FOR SALE.

The subscriber being about to relinquish the milk business, offers for sale, his entire milk establishment, consisting of 23 Cows, 1 Milk Cart and Wagon, and an excellent run of custom. JOHN PARKINSON,

Oct. 16, 1844. Walnut Street, Roxbury.

AFRICAN GUANO.

The cargo of the brig Samos, just arrived direct from Africa. This Guano has been analyzed by J. E. Teschemacher, Esq., and pronounced by him as fully equal to the best cargoes received in the London or Liverpool markets. Purchasers can depend on this as being the *genuine* article. For sale, in quantities to suit, by

CHARLES HOFFMAN, Salem.
VERNON BROWN, 5 Merchants' Exchange.
J. BRECK & CO. 51 & 52 N. Market St., up stairs.

Sept. 17 3m.

CORN SHELLER.

A Corn sheller is one of the most convenient and labor saving implements that the practical farmer has in use. Various machines for this purpose have been invented. It can be used in all cases for large or small sized ears. It is very simple in its construction, and durable in its operation, and no way liable to get out of order; one man can work it to good advantage, though a man to turn, and a boy to feed it, works it much better than one alone. They are so light and portable, as to be easily removed from place to place, and one machine will serve for several families or even the inhabitants of a small town.

For sale at the Agricultural Warehouse and Seed Store Nos. 51 and 52, North Market Street.

JO. BRECK & CO.

CAST IRON SLED SHOES

For double and single Runners, of all sizes, also, Barn Door Rollers, from 3 to 10 inches, for sliding doors, for sale by HENRY RICHARDS,

Dec. 7, 1844. No. 109, State street.

MISCELLANEOUS.

Culture of Coffee.—Just before entering the city of Caraccas, we passed a large and imposing entrance, with a patriotic inscription over head. Finding it to be a coffee estate, we dismounted from our mules and rambled through it. Imagine an extensive grove of trees, the branches of which, commencing about fifty feet from the ground, formed a large, compact, umbrella-like head, with dark-green, thick, glossy leaves, and covered with brilliant scarlet flowers of the size of the hand. These trees, called the *Bucaris*, are planted about thirty feet apart, their leafy heads forming a dense canopy impervious to the rays of the sun. The coffee tree is planted under these, about ten feet apart, in straight rows. At two feet from the ground, the branches radiate horizontally from the main stem, which is allowed to rise to the height of eight or nine feet, where its growth is stopped by splitting the top, and placing wedges in it, the fruit being better and more abundant where the growth of the tree is thus retarded. The tree was now in its full bloom and ripeness, exhibiting conical forms of about six feet in diameter, with leaves of a glossy green, accuminate, and slightly indented. The fruit grew from the bark, about the size and shape of the cranberry. The branches were loaded with beads of every tint: some with a beautiful white flower, in clusters; others with the fruit of every shade, from the palest green to emerald, rose, crimson, and chocolate brown, the sign of maturity.

When to the refreshing shade and stately appearance of the *Bucaris*, and the graceful foliage of the coffee tree, are added the exceeding fragrance of the coffee-flower, frequently perfuming the air for half a mile or more—the thick, velvety turf beneath them, studded with flowers of the most gorgeous colors, and adorned with little rivulets, deemed necessary to convey moisture to the roots of the plants—nothing can be more pleasing to the senses.

No where else, however, but in this valley, and that of Aragua, did I see the plantations shaded by that beautiful tree, the Bucaris. It requires too long a period to obtain the tree of sufficient size for shade. Throughout the West Indies, in Porto Rico, Hayti, Jamaica, and Cuba, I observed that they generally planted the Banana or Plantain, on the sunny side of the coffee tree, to mitigate the heat of the sun by their glossy, pea-green leaves, of six to eight feet in length.

When the coffee-berry becomes of a chocolate brown, and is quite ripe, it is picked by women or young persons, and carried to a platform, which sometimes covers an area of several acres, and spread to dry in the sun. After being dried, the berries are placed in a mill, similar to a cider-mill, where a heavy wheel passes over them and takes off the husk: the coffee is then cleaned by a common fan, and placed in bags for exportation.

The cultivation of the coffee tree is simple, and I see no reason why it could not be advantageously introduced into our Southern States. It flourishes well on the Jamaica mountains, where the climate is quite as cold as South Carolina, Georgia, or Louisiana. The labor is very light. The tree, when once planted, will bear thirty, and sometimes fifty years, with scarcely any attention. The preparation for market is very simple, and can be performed by children. It would be equally profitable with cotton, and I think far more so than either rice or sugar—without requiring the sacrifice of health attending the cultivation of the former, or the terrible using up of flesh and muscle demanded by the latter. The only point to be ascertained is, whether it will bear the climate of our Southern States, if so, there can be little doubt that for productiveness and facility of culture, it will be preferable to any other southern crop.—*S. B. Parsons, in Amer. Agriculturist.*

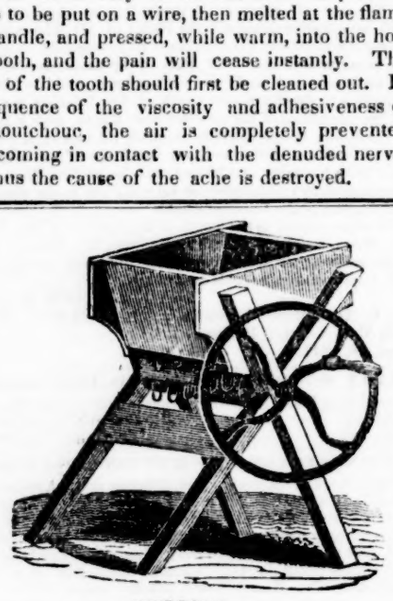
Improper Language.—Never use improper words or indecent language. It betrays a grovelling mind, and does not speak well of the society you keep. Such language offends the ear of modesty, and makes your presence an offence to respectable society. True it is,

> "Immodest words admit of no defence,
> For want of decency, is want of sense."

The young should early habituate themselves to the use of language which is becoming at all times and in all places. A coarse and vulgar young man is loathed and abhorred by all—although for the sake of his relatives, he may be sometimes admitted into respectable society. Avoid, then, all expressions, all faint allusions to what is indelicate and improper; unless you do, you may early be tainted.—*Portland Tribune.*

A Useful Lesson.—Dr. Barney says that when he was young, his venerable teacher gave him a lesson which made a deep impression, and by which he endeavored to profit:—viz: "Never go to bed at night, until you know something which you did not know in the morning."

A new Remedy for Tooth-ache.—Among the thousand remedies for tooth-ache, *caoutchouc* is now stated to be a very efficacious one. A piece of this is to be put on a wire, then melted at the flame of a candle, and pressed, while warm, into the hollow tooth, and the pain will cease instantly. The cavity of the tooth should first be cleaned out. In consequence of the viscosity and adhesiveness of the caoutchouc, the air is completely prevented from coming in contact with the denuded nerve, and thus the cause of the ache is destroyed.

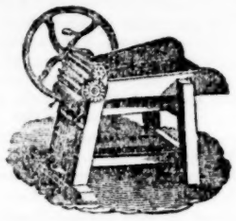


WILLIS'S
Latest Improved Vegetable Cutter.

For sale at the New England Agricultural Warehouse, No. 51 and 52 North Market Street, Boston, Willis's Latest Improved Vegetable Cutter. This machine surpasses all others for the purpose of Cutting Ruta Baga, Mangel Wurtzel, and other roots. The great objection to other machines, is their cutting the roots into slices, which makes it almost impossible for the cattle to get hold of them: this machine with a little alteration, cuts them into large or small pieces, of such shape as is most convenient for the cattle to eat. It will cut with ease from one to two bushels of roots per minute.

JOSEPH BRECK & CO.

Nov. 1.



GREEN'S PATENT STRAW CUTTER.

JOSEPH BRECK & CO. at the New England Agricultural Warehouse and Seed Store Nos. 51 and 52 North Market Street, have for sale, Green's Patent Straw, Hay and Stalk Cutter, operating on a mechanical principle not before applied to any implement for this purpose. The most prominent effects of this application, and some of the consequent peculiarities of the machine are:

1. So great a reduction of the quantum of power requisite to use it, that the strength of a half grown boy is sufficient to work it efficiently.
2. With even this moderate power, it easily cuts two bushels a minute, which is full twice as fast as has been claimed by any other machine even when worked by horse or steam power.
3. The knives, owing to the peculiar manner in which they cut, require sharpening less often than those of any other straw cutter.
4. The machine is simple in its construction, made and put together very strongly. It is therefore not so liable as the complicated machines in general use to get out of order.

HOWARD'S IMPROVED EASY DRAUGHT PLOUGH.

Great improvements have been made the past year in the form and workmanship of these Ploughs; the mould board has been so formed as to *lay the furrow completely over, turning in every particle of grass or stubble, and leaving the ground in the best possible manner.* The length of the mould board has been very much increased, so that the Plough works with the greatest ease, both with respect to the holding and the team. The Committee at the late trial of Ploughs at Worcester, say,

"Should our opinion be asked as to which of the Ploughs we should prefer for use on a farm, we might perhaps say to the inquirer, if your land is mostly light and easy to work, try Prouty & Mears, but if your *land is heavy, hard or rocky,* BEGIN WITH MR. HOWARD'S."

At the above mentioned trial the Howard Plough *did more work, with the same power of team, than any other plough exhibited.* No other turned more than twenty-seven and one half inches, to the 112 lbs. draught, while the *Howard Plough turned twenty-nine and one half inches, to the same power of team!* All acknowledge that Howard's Ploughs are much the strongest and most substantially made.

There has been quite an improvement made on the shoe, or land side of this Plough, which can be renewed without having to furnish a new landside; this shoe likewise secures the mould board and landside together, and strengthens the Plough very much.

The price of the Ploughs is from $6 to $15. A Plough sufficient for breaking up with four cattle, will cost about $10 50, and with cutter $1, with wheel and cutter, $2 50 extra.

The above Ploughs are for sale, wholesale and retail, at the New England Agricultural Warehouse and Seed Store Nos. 51 & 52 North Market Street, by

JOSEPH BRECK & CO.

NEW ENGLAND FARMER

A WEEKLY PAPER.

Terms, $2 per year *in advance*, or $2 50 if not paid within sixty days.

N. B.—Postmasters are permitted by law to frank all subscriptions and remittances for newspapers, without expense to subscribers.

TUTTLE AND DENNETT, PRINTERS,
21 SCHOOL STREET.